

DO NOT ENTER: /U.J./

Docket No.: 043395-0377973
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Valery M. DUBIN et al.	Conf. No. :	8631
Application No.:	10/814,982	Group Art Unit:	1641
Filing Date:	March 30, 2004	Examiner:	Unsu Jung
Title:	SENSOR ARRAY INTEGRATED CIRCUITS		

AMENDMENT AFTER FINAL ACTION UNDER 37 CFR 1.116

MS AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INTRODUCTORY COMMENTS

In response to the Office Action, dated May 20, 2009, finally rejecting claims 1-4, 7-16, 19-21 and 54-59 please amend the above-identified U.S. patent application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 8 of this paper.

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AMENDMENTS TO THE CLAIMS

Favorable reconsideration of this application, in light of the preceding amendments and following remarks, is respectfully requested.

Listing of Claims

1. (Currently amended) An apparatus, comprising:

a microfluidic trench to contain a target molecule, an array addressed device including a plurality of addressable cells, each of the plurality of addressable cells including at least two electrodes, ~~the electrodes having structures and/or charge distributions similar to the target molecule and a self-assembled interlayer configured to modulate a coverage on at least one of the electrodes;~~

an electrochemical detector;

and a spectroscope optically coupled to the array addressed device via a waveguide total internal reflection prism, wherein the waveguide total internal reflection prism is coupled to the microfluidic trench, wherein the array addressed device is configured to detect bonding and/or lack-of-bonding of the target molecule to the array addressed device.

2. (Original) The apparatus of claim 1, wherein the spectroscope includes an infrared spectroscope.